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TRADE POLICIES, STRUCTURAL ADJUSTMENT AND ECONOMIC REFORM; ISSUES RELATING TO NATIONAL TRANSPARENT MECHANISMS IN THE CONTEXT OF THE FIGHT AGAINST PROTECTIONISM

Report by the UNCTAD secretariat

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EXECUTIVE SUMMARY

(i) The promotion of national transparent mechanisms as part of the fight against protectionism, as appropriate, was one of the major decisions of the Cartagena Commitment (cf. TD(VIII)/Misc.4, para. 132). The need to establish or to enhance domestic transparency of trade-related policy-making is now widely recognized and has been supported by extensive investigations and analysis by OECD, GATT and UNCTAD. In December 1991, the Secretary-General of UNCTAD also convened a high-level Expert Group Meeting on Evaluating Protection in an Economy-wide Perspective.

(ii) This programme of work, which began with UNCTAD VII, is fully consistent with the Cartagena Commitment's emphasis on sequencing (para. 51). The UNCTAD secretariat has completed the first two steps of the Cartagena sequencing policy, namely the identification of important issues and the conduct of analytical work which benefits from inputs from governmental and non-governmental experts. Certain aspects of the issue are maturing to the point where intergovernmental consultations might be appropriate. This report describes the set of issues relating to national transparency mechanisms and summarizes briefly the analytical work accomplished to date.

(iii) The work on national transparency mechanisms constitutes only one part of the secretariat's work programme in the area of "protectionism, structural adjustment and trade-policy reforms". Moreover, the deliberations on these issues will provide an important input for progress in other areas; conversely, the secretariat's work to date in other areas will provide important information for the functioning of national transparency mechanisms.

(iv) The analysis supporting transparency initiatives rests largely on the need to remove the trade policy bias in favour of uncompetitive industries seeking protection. Uncompetitive high-cost producers make demands on government to avoid the need for adjustment. In the absence of government help, high-cost producers are threatened by bankruptcy and their workers risk losing their jobs. Consequently, both producers and workers are highly motivated to devote significant time and money to influencing the government - directly and through the media. However, the real costs of protection are usually spread among the community at large, do not bear heavily on any single member, and may be amplified as time passes. In the absence of adequate information regarding the medium and longer-term effects of protection on the community, no effective objections are raised and the one-sided debate usually results in the government acceding to the uncompetitive producers' demands. Accordingly, in many cases governments have resorted to policies which are defensive and protectionist, enabling inefficient capacity to remain in operation at the expense of lower-cost imports. The developing countries clearly have an important interest in this policy bias.

(v) Although public awareness is growing, to date the policy process still ignores the interests of many groups. It is to redress this situation that proposals have been made for more transparent mechanisms - in the form of

special "transparency agencies" - to generate information about, and to promote a wider domestic understanding of, the economy-wide effects of government assistance to industry in all its forms. While transparency mechanisms are not a panacea for preventing protection, recent experience shows that such a mechanism can contribute significantly to a more liberal trading regime.

(vi) The appropriate role of transparency mechanisms in developing countries is quite different because the problems they face are different. Unlike the developed countries, in which trade-policy initiatives are merely fine tuning adjustments, many developing countries are embarking upon pivotal economic reforms. In effect, a growing number of developing countries have adopted policies to integrate their economies more closely into international markets. Many of these economies currently have numerous and significant product and factor price distortions. The effects of reallocating the resources necessary to make these economies competitive are likely to be much more extensive than the corresponding effects of trade policies in developed countries.

(vii) Consequently, the effects of economic reforms on the distribution of income in the developing countries are likely to be much greater. This, in turn, means that the losers from reform (those benefiting from current policies) may incur greater short-run costs. Even though the benefits from reform will far exceed the losses, political opposition to reform will be great. Governments considering bolder reforms will need widespread support from various segments of the economy in order to succeed and to generate continued public support for reform. Since the costs of economic reform are likely to occur sooner than the benefits, the general public must be convinced that the future benefits more than offset the current costs. In the absence of such conviction, the political pressure against reform may become too great to withstand, so that reforms may be reversed before they have had a chance to succeed.

(viii) Chapter II reviews the experiences of transparency agencies in four developed countries: Australia, Canada, New Zealand and the United States of America. This review deals with a number of features of transparency agencies, including the scope of each agency's activities, whether the agency evaluates protectionism from an industry or economy-wide perspective, the degree of political independence of the agency, the openness of the agency's procedures to the general public, and whether the agency is involved in policy-making or the administration of trade-policy measures. This review suggests that the present Australian agency is a good example of a national transparency mechanism.

(ix) Chapter III reviews the nature of the analytical activities of a transparency agency, and reports on techniques used to evaluate the costs and benefits of protection on the directly and indirectly affected sectors and on the economy as a whole.

(x) Based upon previous work by UNCTAD and other international organizations, professional literature, and the report of the UNCTAD Expert Group Meeting, the secretariat suggests that effective transparent mechanisms should have the following characteristics, all of which are deemed vital:

- transparency studies should evaluate the economy-wide effects of protection;

- the transparency process should be open to all affected parties;

- the transparency agency must be independent from political pressure;

- the work programme of the transparency agency should be limited to investigative fact-finding, economic analysis, and policy advice. The agency's credibility might be seriously undermined if it were involved in policy-making or policy implementation;

- the scope of activities should comprise preparatory work, including policy advice to be given prior to the government taking a decision, as well as review studies conducted after policy decisions have been taken;

- transparency studies must be done to the highest standards of objectivity, by competent professionals using modern methods of economic analysis.

The secretariat also finds merit in the UNCTAD expert group recommendation that transparency studies include the broadest scope of trade-policy measures, including domestic measures with trade implications and, in particular, anti-dumping and anti-subsidy (countervailing) actions. Further, there is a need to examine protectionism not only from a national economy-wide but also from a global perspective.

(xi) The Cartagena Commitment called on the UNCTAD secretariat to provide technical assistance to interested countries to help with the establishment of transparent mechanisms. At this juncture "interested" countries are likely to be many: all those striving for more open economies or undertaking economic reforms leading to market-based systems can benefit from transparent mechanisms in order to raise the level of public debate on trade-policy issues. Transparency studies can assist policy-makers to promote freer trade by providing a history of experience from other countries. Such information could prove useful for policy formulation and implementation, and in justifying policy initiatives to the general public. The latter consideration is particularly useful since public acceptance of new policies generally requires public understanding of the reforms introduced and the expected results. This could be especially useful when windows of opportunity for freer trade are opened.

(xii) It should also be stressed that the Cartagena Commitment called on the secretariat to strengthen its technical cooperation activities with the objective of strengthening national capacities for trade and development (TD(VIII)/Misc.4, para. 163). Such technical assistance should include trade-policy reforms, including, on request, assistance to developing countries preparing for their participation in the GATT Trade Policy Review Mechanism.

(xiii) The mandate given to the UNCTAD secretariat to promote the establishment of transparent mechanisms makes it incumbent on the secretariat to be in close touch with existing mechanisms in order to benefit from their advice and experience. In fact, the UNCTAD expert group recommended that representatives of national agencies should meet periodically to share their experiences. Such international networking of officials of national transparency agencies would facilitate the exchange of solutions to methodological problems, and make it easier to share the results of national transparency studies. These meetings would also provide an opportunity for the national agencies to formulate suggestions to the UNCTAD secretariat that might be useful in the review of the problems of protectionism and structural adjustment.

INTRODUCTION

1. The promotion of national transparent mechanisms, as appropriate, was one of the major decisions of the Cartagena Commitment. Paragraph 132 of the Commitment states the decision as follows: 1/

> "Reaffirming paragraph 105(4) of the Final Act of UNCTAD VII [...] that Governments should consider, as part of their fight against protectionism, as appropriate, the establishment of transparent mechanisms at the national level to evaluate measures sought by firms/sectors, and the implications of such measures for the domestic economy as a whole and their effects on the export interests of developing countries and the need to take expeditious and concrete measures towards this end, the Conference agrees that UNCTAD should promote the establishment of these mechanisms, including discussion on their relevant features, and their participation in the work of the appropriate UNCTAD bodies, as appropriate. The secretariat should provide technical assistance to interested countries in connection with the establishment of such mechanisms."

2. The need to establish or to enhance domestic transparency of trade-related policy-making is now widely recognized and has been supported by extensive investigations and analysis. For example, in 1983 OECD analysed the experience of several countries in improving the transparency of public assistance and provided a checklist for the assessment of trade-policy measures that would contribute to the rationalization of national trade-policy measures and encourage structural adjustment. 2/ In 1984, a Committee of Eminent Persons commissioned by the Director-General of GATT recommended that "the making of trade policy should be brought into the open" and that proposals for protective action should be systematically analysed through a "protection balance sheet". It also suggested that each country should establish a special institution to act as a "magnifying glass", highlighting the economy-wide distribution of the costs and benefits of the protection measures imposed by that country. 3/

3. A report issued by another international study group in 1987 also identified the need for special institutional arrangements to promote domestic transparency in protection policy. In addition, it provided the general guidelines that should be met and proposed that an agreement to establish domestic transparency agencies be negotiated as part of the Uruguay Round of multilateral trade negotiations. 4/

4. In 1988 UNCTAD issued a report providing an overview of some existing transparency mechanisms. 5/ Furthermore, in December 1991 the Secretary-General of UNCTAD convened a high-level Expert Group Meeting on Evaluating Protection in an Economy-wide Perspective (hereinafter referred to as the "UNCTAD expert group"). The report on that meeting is contained in another UNCTAD report. 6/

5. This programme of work, which began with UNCTAD VII, is fully consistent with the Cartagena Commitment's emphasis on sequencing (TD(VIII)/Misc.4, para. 51). Thus, the UNCTAD secretariat is (1) to identify issues of

importance, (2) to conduct high-quality analytical work which benefits from inputs from governmental and non-governmental experts, and (3) to hold intergovernmental consultations towards convergency and, where appropriate, negotiations leading to conclusions or outcomes which might include agreements, policy guidelines, recommendations for member States, decisions, or resolutions.

6. With regard to the present set of issues, the secretariat has completed its initial effort on the first two steps of the Cartagena sequencing policy. Certain aspects of the issue are maturing to the point where intergovernmental consultations might be appropriate. However, as this work progresses additional issues will emerge calling for more analytical work and, when appropriate, future intergovernmental consultations.

7. It should be noted that the work on national transparency mechanisms constitutes only one part of the general work programme of the secretariat in the area of "protectionism, structural adjustment and trade-policy reforms". Moreover, the deliberations on these issues will provide important information for progress in other areas. Clearly, progress on transparency will assist the secretariat in its ongoing responsibility to monitor trade-policy events, including progress by governments in meeting previous commitments to halt and reverse protectionism. Conversely, the secretariat's work to date on monitoring, including the maintenance of an inventory on non-tariff measures, will provide important information for the functioning of national transparency mechanisms.

8. The following chapters describe the set of issues relating to national transparency mechanisms and summarize briefly the analytical work accomplished to date. Chapter I describes the trade-policy bias towards protection. Essentially, those who reap short-term benefits from protection (or who experience short-term losses from open trade) are highly motivated to bring political pressure to bear on policy-makers. This chapter also discusses the implications of transparency mechanisms for developing countries (a) in terms of better access to developed-country markets, and (b) for more efficient policy formulation in the developing countries themselves. Chapter II reviews the experiences of transparency mechanisms in four developed countries: Australia, Canada, New Zealand and the United States of America. Chapter III reviews the nature of the analytical activities of a transparency agency, and reports on techniques used to evaluate the costs and benefits of protection on the directly and indirectly affected sectors and on the economy as a whole. Chapter IV lists the basic features of an effective transparency mechanism. The final chapter discusses the role of technical assistance in the establishment of national transparency mechanisms.

Chapter I

THE CASE FOR DOMESTIC TRANSPARENCY

9. The analysis shows that transparency initiatives are needed largely to remove the trade-policy bias in favour of uncompetitive industries seeking protection. Uncompetitive high-cost producers make demands on government to avoid the need for adjustment. In the absence of government help, high-cost producers are threatened by bankruptcy and their workers risk losing their jobs. Consequently, both producers and workers are highly motivated to devote significant time and money to influence the government directly and through the media. They are able to enlist the aid of politically powerful organizations such as industry associations, trade unions and the industry-oriented governmental bureaucracy. Trade unions support such demands because they expect more protection to result in higher wages and job security in the industry concerned. The industry-oriented bureaucracy, structured to provide an interface between government and each industry constituency, is overwhelmingly concerned with the visible short-term economic and social problems of the industry seeking protection. It gives little or no consideration to the less visible and longer-term implications for the economy as a whole. 7/

10. The real costs of any particular demand for protection are usually spread among the community at large and do not bear heavily on any single member. In the absence of adequate information regarding the medium and longer-term effects of protection on the community, the popular press accepts at face value the claims of industry. Consequently, while the matter is being considered by the government no effective objections are raised and the one-sided debate usually results in the government acceding to the uncompetitive producers' demands.

11. In short, the one-sidedness of the debate on protection policy, which makes it so difficult for governments to resist the claims of industries facing competitive difficulty, has been attributed to two interlocking phenomena: (a) the organizational strength and resolve of the industries concerned, compared to the diffused and uninformed community at large; and (b) the focus of government decision-making processes on sectors or industries, rather than on the economy-wide effects of protection.

12. The process through which protection policies are decided takes on greater significance against the backdrop of the recent history of world trade. Since the birth of GATT there have been a number of negotiating rounds that have dramatically reduced the level of tariff rates in the major industrial countries. While recognizing that all countries still have relatively high tariff rates on at least a few import-sensitive products, it is generally agreed that tariffs do not constitute a significant barrier to imports into the OECD countries. And of late the developing countries are also joining this trend as a number of them have reduced or are in the process of dramatically reducing their tariffs on a unilateral basis.

13. Notwithstanding the benefits of open trade, the world is still very far from being a free-trade economy. As tariff rates have come down, other

restrictions on imports have appeared, such as the worldwide quota system governing trade in textiles and apparel. Since the tariff-binding rules of GATT have taken away certain policy options, governments have resorted to other extra-GATT policies such as "voluntary" export restraint agreements to protect selected import-competing industries. And there is growing concern that GATT trade rules are being used to protect individual firms from import competition through the extensive use of anti-dumping and anti-subsidy remedies.

14. Thus there seems to be a movement towards less visible protectionist measures in which those who are harmed by protectionism are not aware of the harm or do not have an opportunity to express their concerns. 8/ Protectionism through non-transparent pressures results in one-sided debates with outcomes highly biased in favour of the sole debater. This one-sided debate has resulted in greater pressures on governments for protection and subsidization not only by single producers but by entire high-cost industries. Accordingly, in many cases governments have resorted to policies which are defensive and protectionist in nature, enabling inefficient capacity to remain in operation at the expense of lower-cost imports.

15. Probably the most important precondition for the removal of protectionist measures is a continuous process of structural adjustment at national levels towards an efficient allocation of productive resources. Pressures to adjust have intensified and are transmitted rapidly between countries owing to the emergence of a more global economy.

16. The developing countries clearly have an important interest in the structural adjustment policies of the developed market economies. The exports of many developing economies are concentrated in labour-intensive sectors such as textiles, footwear and consumer electronics; in natural-resource-intensive sectors such as mining and agriculture; and in mature, capital-intensive sectors such as shipbuilding and steel. Many of these sectors have experienced decline or, at best, sluggish growth in the developed market-economy countries. These are also the sectors in which adjustment is particularly difficult. In labour-intensive sectors production workers are usually poorly educated and have limited skills, so that their opportunities for alternative employment are restricted. Adjustments are also difficult in natural-resource-based sectors because they usually play the dominant role in their regional economies. Such regional considerations are also important in capital-intensive sectors. In addition, workers in capital-intensive enterprises often receive wage premiums not available in other sectors and owners have large financial investments at stake.

17. The process of structural adjustment, therefore, needs to be pursued in a positive sense. Structural policies and adjustment assistance must complement market forces to maximize long-run aggregate output, employment and welfare. In particular, faster progress in the reduction of subsidies and protection would help accelerate the reallocation of resources from stagnant or declining sectors to more efficient and growing sectors of the economy. Government aid to high-cost industries, where adjustment pressures are unlikely to relent in the medium term, would assist the process of change. Adjustment programmes involve complex policies designed to reallocate resources and to modernize existing facilities.

18. Formulating structural adjustment policies is quite complex since efficient adjustment requires close coordination between public and private sectors. The design of effective policies would benefit from the experiences of past and current policies to promote adjustment to change. Other experiences could be analysed to see whether policy objectives are still valid, whether policy objectives were achieved, and which policy instruments have been most effective in advancing structural adjustment in product and factor markets.

19. Promoting public awareness of the economic costs of resisting economic change is also important to enhance the ability of governments to resist those who seek protectionist measures that are not in the interest of the community at large. Although public awareness is growing, to date the policy process still ignores the interests of many groups. The situation might be different if full knowledge of these conditions was brought into the open. This amounts to an information problem. Consumers, downstream industries, and taxpayers (as well as export interests) are not always aware of the costs to themselves of protection. And governments often lack the information needed to evaluate policies proposed for particular industries. It is to redress this situation that proposals have been made for more transparent mechanisms - in the form of special "transparency agencies" - to generate information about, and to promote a wider domestic understanding of, the economy-wide effects of government assistance to industry in all its forms.

20. While transparency mechanisms are not a panacea for preventing protection, the recent experience shows that such a mechanism can contribute significantly to a more liberal trading regime, the most notable example being that of Australia. Clearly, similar mechanisms would contribute to more liberal trading arrangements in other developed countries as well. Such mechanisms will contribute to a better informed policy debate and, thus, to better policies.

21. The appropriate role of transparency mechanisms in developing countries is quite different because the problems they face are somewhat different. Unlike the developed countries, in which trade-policy initiatives are merely fine tuning adjustments, many developing countries are embarking upon pivotal economic reforms. In effect, a growing number of developing countries have adopted policies to integrate their economies more closely into international markets. These policy changes have often been accompanied by moves to give market forces greater scope, to privatize State enterprises, to adopt more liberal regulations towards foreign direct investment, and to liberalize financial markets. Similarly, the democratization process in Central and Eastern Europe has been accompanied by far-reaching institutional changes, rapid moves to market-based economic systems, and further integration into the world economy. A majority of these economies currently have numerous and significant product and factor price distortions. Consequently, costs of production in some sectors are far out of line with international standards. The reallocation of resources necessary to make these economies competitive is likely to be much more extensive in comparison with the effects of trade policies in developed countries.

22. Consequently, the effects of economic reforms on the distribution of income in these countries are likely to be much greater. This, in turn, means

that the losers from reform (those benefiting from current protection) may incur greater short-run costs. Even though the benefits from reform (a more rapid rate of growth in income) will far exceed the losses, political opposition to reform will be great. Governments considering dramatic reforms will need widespread support from various segments of the economy in order to succeed.

23. A transparency mechanism can be of tremendous assistance to governments in two ways. First, before reforms are enacted, the government will need information about the economic distortions to formulate trade policies that will enhance the performance of the economy. Secondly, after the reforms are enacted, the government must inform the citizens persuasively of the expected benefits to the economy in general. This is necessary to generate continued public support for reform. Since the costs of economic reform are likely to occur sooner than the benefits, the general public must be convinced that the future benefits more than offset the current costs. In the absence of such conviction, the political pressure against reform may become too great to withstand; in such cases, the reforms may be reversed before they have had a chance to succeed.

24. The Trade Policy Review Mechanism (TPRM), set up by GATT in April 1989 on a trial basis, is not a national transparency mechanism. Nor is it a comprehensive international transparency mechanism. While the TPRM does provide a means of circulating information about the trade-policy regimes of each member country, its objective is to achieve greater transparency in, and understanding of, the trade measures and practices of individual Contracting Parties. No efforts are made to evaluate the benefits and costs of trade-policy regimes on the countries themselves and on their trading partners. Although this exercise contributes to transparency, its ultimate aim is to increase adherence to GATT rules, and thereby to improve the functioning of the multilateral system.

25. The ultimate aim of national transparent mechanisms, as indicated above, is to generate information about, and to promote a wider domestic understanding of, the economy-wide effects of protection in all its forms. These two different types of transparency mechanisms complement each other, however, and help governments to understand the domestic and international implications of the full package of trade-policy measures.

Chapter II

ILLUSTRATIVE INSTITUTIONS

26. Various types of tariff commissions exist in many countries including the developing countries. In general these bodies have authority to report on tariff assistance, bearing in mind the needs of industries. In some cases, at least to some degree, they have evaluated certain elements of the nation's trade policies on an economy-wide basis. Five such agencies will be briefly surveyed below: the Australian Industry Commission (IC), the Economic Council of Canada (ECC), The Canadian Trade Tribunal (CITT), the New Zealand Economic Development Commission (EDC), and the United States International Trade Commission (USITC). In the case of Canada, the Government has decided to "close" the ECC in June 1992. The Chairman's final message stated that over the years, the ECC had published pathbreaking research and put forward policy proposals which helped to shape the public policy debate. Although the mandate of the Canadian International Trade Tribunal (CITT) extends to trade remedy measures, it follows transparent procedures which will also be reviewed. Similarly, the New Zealand EDC was disbanded in mid-1989 as the result of a budget decision and has no successor.

The Australian IAC 9/

27. The OECD survey on domestic transparency arrangements concluded that the Australian Industry Commission (IC) was the only national organization identified that provided independent and open evaluations on the economy-wide consequences of Government programmes to assist domestic industry. 10/ IC operates under an Act of Parliament; it is an advisory agency with no executive or policy-making role. In order to minimize the political pressures on IC, its Chairman and the Commissioners are appointed for up to five-year terms and cannot be removed from office except by Parliament.

28. The procedures of IC give the public an opportunity to be heard; IC also normally releases draft reports to the public before finalizing its recommendations to the Government. The Government has adopted the practice of publishing the IC's final reports before taking a policy decision. Finally, IC is required to prepare and publish an annual report on the economy-wide implications of government assistance to industry. It is interesting to note that these reports have become among the most influential documents in Australia's economic policy deliberations.

29. Guidelines in the authorizing legislation require IC to be concerned with improving the efficiency of the economy, taking into consideration the interests of consumers and users of products affected by government policies, thereby providing for public awareness of assistance measures. However, in cases involving temporary assistance - for example, unfair trade (anti-dumping and anti-subsidy) actions and trade preferences for developing countries - IC is instructed to limit its consideration to questions of "injury to domestic industry" rather than to conduct an economy-wide evaluation.

30. IC uses up-to-date techniques of economic analysis and publishes the economic consequences of proposed policy initiatives prior to

decision-making. 11/ In addition, the entire package of government assistance to industry is reviewed on an on-going basis.

The Economic Council of Canada

31. The Economic Council of Canada (ECC) was established in 1963 as an independent economic policy advisory body; it has no executive or policy-making role. The objective of ECC is to promote community consensus about desirable economic policies. ECC generally initiates its own work, which ranges over all economic policy issues. The legislation also provides for the Federal Government to ask the Council to undertake "special references", but the nature of its recommendations is not subject to Government instruction.

32. The Council is responsible for the publication of an annual review which is both an analysis of economic conditions and policy evaluation, and an assessment of contemporary issues. Its studies and research are published in consensus documents, research studies, discussion papers, conference papers, and in a quarterly bulletin. The Council may investigate and report on any economic issues relevant to overall performance. It focuses on longer-term economic research and has sponsored the development of a quantitative model of the Canadian economy ("Candide"), which it uses in preparing its annual reviews.

33. The Council does not, however, focus on industry assistance or protection issues in any systematic way. The bulk of its output has been devoted to domestic microeconomic issues (e.g., the labour market, productivity and technical change), macroeconomic issues (e.g., monetary and fiscal policy, the balance of payments), and social issues (e.g., housing, education, health and welfare). Its capacity to abstract from narrow viewpoints would appear to be hampered by the composition of its membership, with representatives of management, labour, economic sectors and regions, and by the statutory requirements for consensus within the Council.

34. The Canadian Government abolished ECC in June 1992. That decision was part of a package of budget cuts aimed at reducing federal expenditures. There is, however, another Government institution which deals with economic and trade-related matters, namely the Canadian International Trade Tribunal.

The Canadian International Trade Tribunal (CITT)

35. CITT is an independent quasi-judicial body which reports to Parliament through the Minister of Finance. The Tribunal began operations in December 1988 and took over all the inquiries and appeal functions of the Tariff Board, the Canadian Import Tribunal and the Textile and Clothing Board. The Government's intention in amalgamating the three institutions was to strengthen and streamline Canada's facilities for trade remedies and inquiries.

36. The Tribunal carries out its statutory responsibilities in an independent and impartial manner. It is not part of any Government department or agency. While the Government or the Minister of Finance may request the Tribunal to conduct various inquiries, such requests are made publicly and the Tribunal decides the manner in which it will respond. The CITT Act states that hearings should be carried out as "informally and expeditiously" as possible.

The Tribunal has the power to subpoena witnesses and to require parties to submit documents. In virtually all of its programmes, the Tribunal conducts hearings open to the public.

37. The Tribunal has both judicial and advisory functions. It acts as an administrative court in cases involving appeals from customs and excise decisions as well as anti-dumping and anti-subsidy injury inquiries. It also acts almost as a standing commission of inquiry with powers to conduct research, find facts, hold public hearings and report on a broad range of trade-related matters. These programmes relate to various import safeguard inquiries and general inquiries into trade and tariff matters.

38. Finally, the Governor in Council may ask the Tribunal to conduct an inquiry and to report on any matter relating to the economic, trade or commercial interests of Canada. The Minister of Finance may also ask the Tribunal to conduct an inquiry and report on any tariff-related matter, including any which concerns the international rights and obligations of Canada. In conducting a general inquiry, the tribunal normally invites written submissions from interested parties, publishes its own background papers and holds public hearings as a means of getting all the facts and opinions which are relevant to the inquiry into the open.

The New Zealand EDC

39. The New Zealand Economic Development Commission (EDC) has been in operation since early 1987. It essentially replaced the Industries Development Commission, which had in turn superseded the Tariff and Development Board in 1975. The two earlier bodies operated under legislation which formally secured their independence and provided for open procedures including public hearings and published reports. However, in practice, they were more concerned with determining the level and forms of assistance needed for the development of particular industries than with providing advice based on national welfare considerations.

40. EDC was created pursuant to a report on the establishment of an Industrial Development Board issued by an advisory body appointed by the Government. The proposed Board would advise the Government regarding the encouragement of those industries and economic activities of greatest benefit to the country as a whole.

41. Instead of recommending the establishment of a body that would be "picking winners", however, the report noted that the national welfare would be better served by having an advisory agency to "increase public scrutiny and understanding of Government economic policies and hence ... the achievement of a more prosperous and fair economy". It was also stressed that the Board "should not adopt a sectoral or purely financial approach, looking only at the profit or loss for one activity or project. Rather it should consider the implications of a proposal from a national or broad community perspective". 12/

42. The report recommended that a Chairman and three Commissioners be appointed for periods of up to five years through an Act of Parliament. Commissioners would have the power to initiate their own inquiries. They

would be encouraged, though not required, to hold public hearings; however, there is an obligation to publish the reports to Governments. In the event, EDC was created by Cabinet directive rather than by an Act of Parliament, although in other respects it conformed to the arrangements that had been proposed. As was mentioned earlier, the EDC has, however, been disbanded.

The USITC

43. The United States International Trade Commission (USITC) is an autonomous advisory and investigative agency; it has no executive or policy-making role. USITC is headed by six Commissioners, no more than three of which can be from the same political party. The conditions and timing of appointments to USITC have been designed to minimize the scope for executive manipulation of its membership. (Each Commissioner is appointed by the President with the consent of the United States Senate for a fixed nine-year period; and the Chairman is appointed by the President for a two-year term. However, successive Chairmen cannot be from the same political party.) In addition, the 1974 Trade Act removed the Commission's budget from executive control. These features are unique among Federal Agencies of the United States Government.

44. USITC has three major responsibilities: (1) to investigate escape clause and unfair trade actions (anti-dumping, anti-subsidy, and infringement of intellectual property rights); (2) to maintain the United States tariff schedule and provide information to trade negotiators; and (3) to conduct studies requested by the President or Congress on issues relating to international trade (so-called "section 332 studies"). 13/

45. It is this third responsibility that is related to possible economy-wide analyses of trade policy issues. However, the scope of each "section 332" study is negotiated to conform to the political interests of the particular request by the President or Congress; the scope is seldom economy-wide. The studies are based on up-to-date economic methods; they are not justifications or rationalizations of any particular position. Moreover, there are generally opportunities for public input from all sides of the issue.

46. USITC does not have an on-going responsibility to study the effects of trade policies on the United States economy, nor to provide advice to the executive or legislative branches of Government. However, USITC was recently requested by the Senate Committee on Finance to conduct a "section 332" study on the economy-wide effects of significant United States import restraints. 14/ The reports resulting from this exercise constitute a one-time transparency study. 15/

47. As a synthesis, it is important to note that none of the above national agencies has a policy-making role; all are advisory to the Government. On the other hand, two of the agencies (USITC and the CITT) have judicial as well as advisory responsibilities. They administer the injury test for anti-dumping and countervailing duty actions as well as other legalistic issues. In contrast, the Australian Industry Commission has no such administrative role.

Chapter III

ANALYTICAL ACTIVITIES OF A TRANSPARENCY AGENCY: POSSIBLE SCOPE

48. A transparency agency is primarily responsible for the evaluation of existing trade policies and measures and for providing information that is useful to policy-makers who are considering taking decisions on new trade-policy initiatives. The information to be provided should cover all sides of the issues being studied and should be communicated to all interested parties, i.e. the public in general. The information to be provided would normally include the benefits to the country to be derived from a protective policy as well as the costs. Conversely, the benefits and costs of freer trade policies should also be identified.

49. The UNCTAD Expert Group devoted considerable time to discussing the feasibility and possible methodologies of estimating the costs and benefits of protection. 16/ There was a consensus that economic tools were available to estimate the costs and benefits of protection for the individual sectors being protected as well as for the economy as a whole. The group discussed the pros and cons of alternative methodologies, including partial equilibrium and general equilibrium models. 17/ It was agreed that both categories of models had strengths and weaknesses. Good modelling required incorporating the important institutional features of the given trade policy into the economic analysis. For this the tools of analysis must be flexible to capture the differing types of issues that will arise. Furthermore, the analytical tools cannot simply be taken from one country and copied by another, without appropriate modification. It was further agreed that each country must have its own modelling capability. To the extent that some developing countries did not have such capability, technical assistance would be useful. One approach to solving this problem was the suggestion for such developing countries to begin by using the simpler tools of economic analysis, then over time to graduate to more complex methods. 18/ This is especially true for those developing countries which lack the required data or technical expertise to use more complex methodologies.

50. Calculation of the costs and benefits of protection on trading partners is not yet within the scope of national transparent mechanisms. Generally, the net effects on the trading partner are negative. 19/ At issue is the magnitude of benefits accruing to those domestic residents and industries who gain versus the magnitude of the costs inflicted on those domestic residents and industries who lose from protectionism; it is also relevant to calculate any revenues (or costs) accruing to Government. A second important point is that the focus is on providing information relevant for trade-policy decisions. Thus, any evaluation will concentrate on the costs and benefits of a new policy initiative, given the existing structure of trade and protection. Attention is not always given to an evaluation of the economy-wide effects of a country's total package of trade restrictions.

51. There are two major categories of economic analysis relevant to these calculations. The first category involves partial equilibrium analysis of the microeconomic gains and losses to those directly tied to the product subject to protection. The groups to be considered include the buyers and sellers of

the product as well as the buyers and sellers of upstream and downstream products. For example, protection that raises the price of domestic steel will harm factors of production employed in downstream steel-using industries such as automobiles (as well as consumers of automobiles). Similarly, factors of production employed in upstream coal mining will benefit. This method of analysis emphasizes the effects of protection on the industry itself and on closely related upstream and downstream industries, including any implications for Government spending and taxing. As such it should capture the most significant effects; however, there are other economy-wide effects that are often overlooked.

52. The second category of economic analysis involves calculations using computable general equilibrium models. These models quantify all the effects, i.e. the direct and indirect (upstream and downstream) effects of protectionist policies. They can also incorporate other macroeconomic considerations such as (1) the displaced workers being re-employed in other unrelated industries and (2) exchange rate implications for imports and exports of other products. This method is designed to evaluate the full economy-wide effects of protectionism.

53. Both the partial equilibrium and computable general equilibrium models involve comparative static analysis. The models are used to calculate the values of important economic variables when a particular protectionist policy has been changed. The values of these calculated variables are then compared with existing observable values of these same variables, i.e. with current protectionist policies in place. The differences in the values of these variables constitute the effects of the particular protectionist policy being studied.

54. The variables commonly analysed would include the direct effect on output of the domestic industry (and jobs), the effect on prices paid by domestic buyers for domestic output and for imports, the effect on profits, the effect on Government revenues (and costs), etc. Similarly, indirect effects on upstream and downstream industries would also be examined. Additional macroeconomic effects would also be quantified if computable general equilibrium models are used.

55. These models are definitely not dynamic in nature. One cannot trace the effects of changing protectionism over time. Questions cannot be answered regarding interim adjustment costs such as income losses to displaced workers while they are searching for alternative employment. Other factors would be overlooked such as wealth losses to workers who must relocate to another community and lose on the sale of their home in a depressed local labour/housing market. This is not meant to imply that such questions cannot be studied and answered. It is simply that such questions are generally outside the scope of traditional partial equilibrium and computable general equilibrium models.

56. A second comment concerns the a priori information requirements of these models. These methods of analysis require information on the magnitude of the economic relationships among various economic variables. In many cases, parameter values can be taken from studies published by other scholars.

In other cases, the values can be assigned on the basis of qualitative information. It is also possible in some cases to calculate the values of a particular economic parameter using the values of other known economic parameters. When all is said and done, the parameter values being used in both types of analysis described above must be considered as estimated with error. Unfortunately, the error cannot be quantified as is often the case with classical statistical estimates. Consequently, the ultimate estimates that are derived from the use of these models cannot be statistically qualified.

57. Thirdly, an alternative approach would be to estimate econometrically the relationships among the important economic variables to be analysed using a history of real world data. However, in order to incorporate the full economy-wide effects, the econometric model would be every bit as complex as a computable general equilibrium model. The statistical problems in successfully estimating models of this complexity are immense. Given the differences in institutional constraints of the different protectionist policies, different models would be required to analyse the effects of different policies. Moreover, if the historical period used to estimate the econometric model were not representative of the current period for which protectionist policy analysis is to be made, the model would not be applicable at all. Given the costs of estimating these models and the uncertainty regarding their applicability, few scholars would suggest their use for economy-wide policy analysis.

58. The above discussion is limited to methods to study the effect of trade measures on the subject country. However, any trade policy that affects the home country must also affect other countries as well. In most cases, trade restraints will have adverse economic effects on the country's trading partners. These adverse effects might, in turn, have indirect rebound effects owing first to normal economic forces, and second, to possible retaliation by the adversely affected countries.

59. Methods of economic analysis do exist to study the implications of new instances of protection on a worldwide industry, including directly affected upstream and downstream sectors, if the required data are available. 20/ In general, it is feasible to study the worldwide implications of new policies affecting agricultural and industrial commodities. However, data problems might be difficult for manufactured products involving several stages of processing. But such studies may have to be confined initially to the effects on a particular industry, given the concomitant difficulties in estimating the effects of protection on the welfare of all countries.

Chapter IV

AN EFFECTIVE TRANSPARENCY MECHANISM: SOME BASIC FEATURES

60. The UNCTAD Expert Group Meeting on Evaluating Protection in an Economy-wide Perspective discussed the features of national transparent mechanisms. The Group reviewed the agencies of four countries (cf. chap.II above). Moreover, the Group learned of the experiences of Brazil, India, Morocco and Nigeria. 21/ To date, none of the latter countries have true transparency agencies. The participant from Brazil indicated that trade policy was overly influenced by protectionist pressures with little input from consumers. The Indian Bureau of Industrial Cost and Prices (BICP) conducts studies on trade policy for the Government using modern economic methods. The BICP reports are generally confidential. 22/ The participants from Morocco and Nigeria stated that the trade policies of their countries had recently been reformed. Both countries have agencies responsible for policy: the Foreign Trade Council in Morocco and the Tariff Review Board in Nigeria. While these agencies are not insulated from political pressure, they both have provisions for inputs by representatives from private-sector representatives.

61. After discussing in detail the work programmes and methodologies of four illustrative institutions, the Expert Group generally agreed that the Australian Industry Commission was a good model for an effective agency. The United States International Trade Commission had recently completed a comprehensive transparency study; however, this was a one-time exercise at the request of the United Sates Senate. While the United States study was highly regarded, the expert group did note that, in contrast to the United States one-time investigation, the Australian Commission had an on-going responsibility to conduct annual reviews on the costs and benefits of trade policies and measures, including any new initiatives.

62. The primary advantage of the Australian Industry Commission as a model transparency agency, it was agreed, resulted from a number of institutional features. The Commission has continuing legislated responsibility to study the economy-wide effects of trade policy, including the issuance of an annual public report. Its study procedures are open to the public, as is its policy advice. The Commission enjoys a high degree of political independence from political pressure. Its role is to conduct inquiries and to provide policy advice to the Government; it has no policy-making authority.

63. The United States International Trade Commission has served as a transparency agency on an ad hoc basis. It has conducted studies at the request of the President (through the United States Trade Representative), the Senate Finance Committee, and the House Ways and Means Committee. The scope of studies to be conducted has been negotiated between the staff of the Commission and the requesting body. Hence, the studies usually have a political agenda. For example, the recent transparency study conducted by the Commission was confined in scope to exclude the costs and benefits of unfair trade actions (e.g., anti-dumping and countervailing duties). 23/ On the positive side, it provided opportunities for public input. In general, the Commission has a reputation for objective studies: its role is investigative, it has no policy-making responsibility, and it has a well-trained professional staff.

64. In the light of these and other considerations, the UNCTAD secretariat suggests that effective transparent mechanisms should have the following characteristics, all of which are deemed vital:

(1) Transparency studies should evaluate the economy-wide effects of protection. This will safeguard against the excessive use of power by policy-makers in favour of special interests at the expense of the general public. Similarly, transparency studies should include alternative programmes to assist firms and workers in adjusting to changing competitive conditions.

(2) The transparency process should be open to all affected parties. There should be opportunities for the public to provide inputs and to voice their views during the process. Any policy advice given to the government should also be released to the public.

(3) The transparency agency must be independent from political pressure. Such political independence might be enhanced if the agency were not located in a policy-making government Ministry, nor in a government agency responsible for the administration of trade regulations.

(4) The work programme of the transparency agency should be limited to investigative fact-finding, economic analysis, and policy advice. The agency's credibility might be seriously undermined if it were involved in policy-making or policy implementation.

(5) The scope of activities should comprise preparatory work, including policy advice to be given prior to the government's taking a decision, as well as review studies conducted after policy decisions have been taken. Review studies should be aimed at achieving better trade-policy decisions in the future rather than at evaluating the performance of policy-makers.

(6) Transparency studies must be done to the highest standards of objectivity, by competent professionals using modern methods of economic analysis. The credibility of the transparency agency will depend upon the track record of the agency's output.

65. Two final issues were raised by the UNCTAD expert group. First, transparency studies should cover the broadest range of trade-policy measures, including domestic measures with trade implications and, in particular, anti-dumping and anti-subsidy (or countervailing) actions. Only by including all trade measures can a study truly reveal the present and potential economy-wide effects of the trade sector on the level of income, employment and well-being of all citizens in the country.

66. Secondly, it was generally agreed that there is a need for the examination of protectionism not only from an economy-wide perspective but also from a global perspective. Two global considerations were identified. One is the adverse effects of one country's trade policies on particular trading partners, especially the developing countries. The second concerns the effects of general trade-policy regimes on the international distribution of gains from trade. Some participants in the expert group felt that these global issues formed part of the responsibilities assigned to national

transparency agencies. Other participants suggested that national governments were unlikely to assign high priority to such activities; consequently, if such issues were studied at all they would be studied poorly. Pragmatically speaking, some experts considered that if global transparency is to be achieved, it will in all likelihood, have to be provided by a global transparency agency.

Chapter V

THE ROLE OF TECHNICAL ASSISTANCE

67. The Cartagena Commitment called on the UNCTAD secretariat to provide technical assistance to interested countries for the establishment of transparent mechanisms. At this juncture "interested" countries are likely to be many; those striving for more open economies or undertaking economic reforms towards market-based systems can benefit from transparent mechanisms to raise the level of public debate over trade policy issues. Transparency studies can help policy-makers to promote freer trade by providing a history of experience from other countries. Such information could prove useful for policy formulation, policy implementation, and in justifying policy initiatives to the general public. The latter consideration is particularly useful since public acceptance of new policies generally requires public understanding of the reforms introduced and the anticipated results. This could be especially useful when windows of opportunity for freer trade are opened.

68. The Expert Group Meeting on Evaluating Protection noted that the relationship between national and international transparency mechanisms is complementary rather than conflicting. The Group of Experts saw a clear need for technical assistance to countries that had difficulty in providing information solicited by the GATT secretariat in connection with the Trade Policy Review Mechanism (TPRM). The TPRM reviews are quite comprehensive and include a wide range of trade-policy measurers administered by numerous Ministries which needed to be brought together so that each Government can have a comprehensive understanding of its total trade-policy package. It should also be stressed that the Cartagena Commitment (para. 163) called on the UNCTAD secretariat to strengthen its technical cooperation activities with the objective of strengthening national capacities for trade and development. Such technical assistance should include, inter alia, trade-policy reforms, including, on request, assistance to developing countries preparing for their participation in the GATT Trade Policy Review Mechanism.

69. Technical assistance in the area of transparent mechanisms has two functions. There is a need first to provide as many countries as possible with information on the value and importance of establishing such mechanisms, and, secondly, to assist in creating the necessary institutional infrastructure. The first function calls for a series of seminars to be held at interregional, regional or national levels, as appropriate. The second function of institution building and training, which constitute a continuum, can be served through national workshops and advisory missions. Governments having transparent mechanisms or similar institutions can make a significant contribution in this respect by providing the necessary training of officials in their own capitals.

70. While noting that the tools of economic analysis are available, the Expert Group recommended that each country should have its own analysis and modelling capability. The data problems are, however, more accurate in many developing countries and technical assistance can contribute significantly to the capabilities of these countries in overcoming these problems.

71. The mandate given to the UNCTAD secretariat to promote the establishment of transparent mechanisms makes it incumbent on the secretariat to be in close touch with existing mechanisms to benefit from their advice and experience. In fact, the UNCTAD Expert Group recommended that representatives of national agencies should meet periodically to share their experiences. Such international networking of officials of national transparency agencies would facilitate the exchange of solutions to methodological problems, and make it easier to share the results of national transparency studies. These meetings would also provide an opportunity for the national agencies to formulate suggestions to the UNCTAD secretariat that might be useful in helping the secretariat to fulfil its work programme.

Notes

1/ A New Partnership for Development: The Cartagena Commitment (TD(VIII)/Misc.4).

2/ Transparency for positive adjustment, OECD, Paris, 1983. Other OECD reports which reflect the interest in this issue of domestic transparency are: Competition and trade policies; their interaction (1984); Costs and benefits of protection.

3/ See the Leutwiler Report, "Trade Policies for a Better Future", GATT, 1985.

4/ Oliver Long et al, Public Scrutiny of Protection: A Report on Policy Transparency and Trade Liberalization, Trade Policy Research Centre, London, November 1987.

5/ Godfrey A. Rattigan, Domestic Transparency Procedures, (UNCTAD/MD/MISC.23), 22 April 1988 (English only).

6/ UNCTAD/ITP/77, 17 January 1992 (English only).

7/ Long et al, op. cit.

8/ For example, the United States anti-dumping and anti-subsidy (countervailing) duty laws do not allow the administrators to take into consideration the interests of the buyers of the imports subject to the proceedings.

9/ The Australian Industries Assistance Commission has been given a revised mandate and renamed the Australian Industry Commission.

10/ OECD, Transparency for Positive Adjustment (Paris: OECD, 1983), p. 246.

11/ IC estimates the price effects of assistance to industry using a concept called the "Effective Rate of Assistance" (ERA). The ERA is a measure of the net price benefit to an industry resulting from import protection (or domestic subsidy) taking into account any other assistance or impediments to inputs such as subsidies to inputs, tariffs on imported inputs, and domestic taxes on domestic inputs. Output and employment effects are estimated using a large-scale multisector model of the Australian economy known as the ORANI model. ORANI is a computable general equilibrium type model. See the annex for a discussion of alternative estimation methods.

12/ New Zealand Government, Report of the Steering Committee to advise on the Proposed Industrial Development Board, Government Printer, Wellington, 1986.

13/ USITC is authorized to initiate studies of its own; however, this provision is seldom used.

14/ See "The Economic Effects of Significant United States Import Restraints, Phase I: Manufacturing," (USITC Publication 2222, October 1989), "The Economic Effects of Significant United States Import Restraints, Phase II: Agricultural Products and Natural Resources," (USITC Publication 2314, September 1990), and "The Economic Effects of Significant United States Import Restraints, Phase III: Services," (USITC Publication 2422, September 1991). It is important to note, however, that USITC was instructed to exclude from its study import restraints resulting from unfair trade (anti-dumping, anti-subsidy and infringement of intellectual property rights) actions.

15/ This study used partial equilibrium analysis to estimate the direct, upstream and downstream effects of protection on producers, workers and consumers. Additional macroeconomic effects are estimated and reported in the third phase of the study using a computable general equilibrium model.

16/ For a more detailed discussion see "Report on evaluating protection in an economy-wide perspective" (UNCTAD/ITP/77), Annex II, and the annex to this document.

17/ The alternative methodologies are described in more detail in the background report (UNCTAD/ITP/77, annex II, chap. 2, and appendix I).

18/ The Australian experience began with the calculation of "effective rates of protection" (ERP). The ERP is an index that incorporates the assistance given to domestic industry from protection of a final good and the competitive disadvantage imposed on the industry from protection of a domestic industry that supplies inputs. Over time this index was expanded to include the assistance given the domestic industry by various subsidy programmes as well as the disadvantages posed by other domestic policies.

19/ Under certain circumstances the net effect on the trading partner could be zero. There are unique circumstances in which the effects of protection by one country could benefit a particular trading partner, but only at the expense of other trading partners. For example, a "voluntary" export quota system may reserve a share of the importing country's market for imports from a non-competitive exporting country. Alternatively, export quotas permit exporters to raise their prices, thereby, extracting economic rents from consumers in the trade-restricting country.

20/ Of course, it would not be possible to study the implications of retaliation, unless the details of retaliation were known.

21/ Recent informal discussions with the Polish Authorities revealed that this country may also be interested in such a mechanism.

22/ However, the Government of India has recently announced its decision to convert this organization into a national transparency mechanism.

23/ This omission may not be too serious in practice. The United States International Trade Commission has administrative responsibility in anti-dumping and countervailing duty proceedings. It is difficult for an administrative agency to conduct an objective investigation to evaluate its own administrative functions.

Annex

EVALUATION OF THE COSTS AND BENEFITS OF PROTECTION: POSSIBLE APPROACHES

This annex provides additional information about the methodological issues.

1. Partial equilibrium analysis: homogeneous goods

The introduction of a new protective instrument will adversely affect domestic consumers/buyers, but will benefit domestic producers. In addition, a tariff would generate revenue for the home country government. If a quota were used, quota rents would be captured by someone, depending on the administrative procedures being used. For example, if the quota were administered using import licences which were given to domestic importers, the quota rents would be captured by domestic importers. If quota licences were auctioned by the government, the government would capture the quota rents. If the quota were an export quota, the rents would be captured by foreign exporters.

To summarize, protection results in three direct effects: consumer losses, producer gains, and tariff revenue or quota rents (hereafter revenue/rents). For homogeneous goods, the law of one price holds; thus, the price effect used to calculate all three of these effects is the same. a/ Finally, since consumers lose on goods purchased from domestic producers as well as imports, consumer losses will always exceed producer gains. b/

To estimate the consumer losses, one needs three elements of information: (1) the initial value of consumption (VC_o), (2) the percentage price effect (or quantity effect) of the import restriction (p), and (3) the extent to which the quantity consumed responds to a change in the price (the own-price elasticity of demand = de > 0). c/ The upper bound estimate of the consumer loss is CL_u, where:

$$CL_u = p\ VC_o$$

However, the higher price will reduce consumer purchases. Taking this response into consideration yields a consumer loss (CL) of:

$$CL = p\ VC_o\ [1 - (p\ de)/2].$$

To estimate the producer benefit, one needs two additional sets of information: (1) the initial value of domestic output (VD_o) and (2) the extent to which domestic output will increase owing to the higher price (the elasticity of domestic supply = se > 0). The lower bound estimate of the producer gain is PG_1, where:

$$PG_1 = p\ VD_o.$$

However, the higher price will induce domestic producers to increase output. Taking this response into consideration yields a producer gain (PG) of

$$PG = p\ VD_o\ [1 + (p\ se)/2].$$

To estimate the revenue/rents (R), one additional piece of information is needed, namely the initial value of imports (VM_o). d/ The upper bound estimate of the revenue/rent is (R_u), where

$$R_u = p\ VM_o.$$

However, the higher price owing to protection will induce consumers to substitute domestic output for imports, thereby reducing the volume of imports. Taking this response into consideration yields an estimate of the revenue/rents effect of:

$$R = p\ VM_o\ [1 - (p(se + de))/2].$$

2. Effective rate of protection/assistance (ERA)

The ERA estimates the net assistance provided to a domestic industry by the entire package of government policies affecting that industry. It includes both domestic policies (which would also have international trade effects) and border policies. The measurement addresses the question: What is the total effect of all government policies on the rewards to primary factors employed in the industry, i.e., value added? The measure is:

$$ERA = (VA - VA') / VA'$$

where VA is the value added with government policies in place, and VA' is the value added that would exist at world prices (i.e., without government policies that assist the industry).

The data required to calculate ERAs includes the same data as listed in the previous section plus detailed information on domestic policies (primarily subsidies and taxes) that affect a given industry, including any distortions that affect the prices of primary factors. In addition, one needs input-output relationships between the subject industry and its upstream suppliers, together with domestic and international policies that affect prices of those input components and materials. On the other hand, demand and supply elasticities are not needed.

3. Partial equilibrium analysis: differentiated goods

If the import good subject to an import restriction is differentiated from the domestic import-competing good, there are really two goods (the import good and the domestically produced good) whose demands are related. An import restriction will result in an increase in the price of imports, thereby, creating losses to consumers. In addition, the higher price of imports would divert spending from imports to the domestic substitute, i.e., the demand for the domestic import-competing good would increase (shift). This shift in demand would induce an increase in domestic output and, in all likelihood an increase in the price of the domestic good. Producers of the domestic good would benefit from the increased demand and higher price; however, consumers of the domestic good would lose. There would also be a revenue/rent effect, as discussed in section 1 above.

To summarize, protection results in three direct effects: consumer losses from the higher price of imports and the higher price of the domestic good; producer gains from the increased demand and higher price of the domestic good; and the revenue/rent effect on imports. Regarding the domestic good, the higher price which benefits producers is precisely offset by the same higher price which harms consumers; the net welfare effect is zero!

To estimate the consumer losses from higher import prices, one needs three pieces of information: the initial value of imports (VM_o), the percentage effect of the import restriction on the price of imports (P_m), and the extent to which the quantity of imports responds to a change in the price (the import demand elasticity = $me > 0$). The upper bound estimate of the consumer loss on imports is CLM_u, where:

$$CLM_u = P_m \, VM_o.$$

However, the higher price will reduce consumer purchases. Taking this response into consideration yields a consumer loss on imports (CLM) of;

$$CLM = P_m \, VM_o \, [1 - (P_m \, me)/2].$$

The producer gains from the higher price of the domestic good are identical to the consumer losses. The monetary transfer from consumers to producers is more difficult to estimate. The biggest problem is that the effect of protection on the price of imports is not the same as the effect on the price of the domestic good; in all likelihood, the indirect effect of protection on the price of the domestic good will be much smaller than the direct effect of protection on the price of imports. One also needs information on the initial value of domestic output sold in the domestic market (VD_o), and the extent to which output responds to an increase in price (i.e., the elasticity of domestic supply = $se > 0$). The lower bound estimate of the producer gain (and consumer loss) on the domestic good is PGD_1 (= CLD_1):

$$PGD_1 = CLD_1 = p_d \, VD_o,$$

where p_d is the percentage effect of protection on the price of the domestic good. e/ The higher price will also induce domestic producers to increase output. Taking this response into consideration yields a producer gain of PGD (= consumer loss of CLD), where:

$$PGD = CLD = p_d \, VD_o \, [1 + (p_d \, se)/2].$$

The revenue/rents can easily be estimated from information already discussed. The upper bound estimate (R_u) is:

$$R_u = p_m \, VM_o.$$

Taking into consideration the reduction in imports owing to import protection yields:

$$R = p_m \, VM_o \, [1 - (p_m \, me)/2].$$

4. Upstream effects

The upstream effects seem at first glance to be easy to quantify. The protected domestic industry expands output, thereby, increasing its demand for upstream inputs. The producers of these upstream inputs will expand output to satisfy this increased demand. This output effect is typically estimated using input-output relationships (i.e., fixed input-output coefficients). Thus, the upstream industry is estimated to expand output in strict proportion to the increase in output of the protected domestic industry. However, any increase in factor rewards in the upstream industries is already included in the producer benefits estimated for the protected industry. f/

If the increase in output in the upstream industry results in higher costs and prices, the protected domestic industry will pay higher prices for the inputs. This effect is already incorporated into the supply elasticity of the protected domestic industry. However, other buyers (i.e., buyers not belonging to the protected domestic industry) of the upstream inputs would lose. For example, a protected automobile industry would benefit the upstream domestic steel industry to the disadvantage of other domestic steel using industries. These adversely affected buyers could be identified using a national input-output table. For practical purposes, however, these effects are likely to be of second order smallness. If these buyers constitute a large share of the demand for the upstream inputs, the protected industry's share of demand for these inputs will be small. This, in turn, implies that the increase demand owing to protection will have a minimal effect on the price of the upstream inputs. Conversely, if the protected industry accounts for a major share of the demand for the upstream input, the adversely affected domestic buyers will be small in volume.

5. Downstream effects

Downstream users of protected inputs are adversely affected by the higher price of imported inputs and the higher price of domestic import-competing inputs. g/ The higher costs imposed on the downstream industries must be passed on to consumers in the form of higher prices. The higher prices induce consumers to divert spending to other goods, including imports of substitute goods. Thus, domestic producers of downstream goods will incur higher costs and will sell a lower volume. Because of the diversion of consumer spending away for the adversely affected downstream product, the producer will not be able to pass the full increase in costs on to buyers in the form of higher prices. Thus, the percentage cost increase (c) will exceed the percentage price increase (p). An upper bound estimate of the producer losses (PDL_u) is:

$$PDL_u = VD_o\ (c-p),$$

where VD_o is the initial value of output by the downstream producer. Taking into consideration the percentage reduction in output (q), the producer loss becomes:

$$PDL_u = VD_o\ (c-p)\ [1 - q/2];$$

where q can be estimated as (p de), where de is the elasticity of demand for the downstream good. Thus, the producer loss (PDL) is

$$PDL = VD_o\ (c-p)\ [1 - (p\ de)/2].$$

An upper bound estimate to the consumer losses (CLD_u) is

$$CLD_u = p\ VD_o,$$

where VD_o is the initial value of domestic output which is sold to domestic consumers. Noting that consumption of the downstream product will decline owing to the higher market price, the consumer loss (CLD) become

$$CLD = p_d\ VD_o\ [1 - (p_d\ de)/2],$$

where de is the demand elasticity.

6. Computable general equilibrium analysis

Computable general equilibrium (CGE) models simulate the interactions among producers and consumers within an economy in markets for goods, services, and primary factors of production (e.g., labour and capital). The models explicitly incorporate interactions among different sectors of the economy, and include upstream/downstream linkages, and intersectoral mobility of primary factors of production. They also incorporate total spending and balance-of-payments constraints within the implications for price levels and exchange rates.

The models are not dynamic; they are, like partial equilibrium models, comparative static analyses. They answer questions such as: How would the domestic economy change if a package of protectionist policies were introduced (or eliminated) with all other government policies and foreign conditions unchanged? The answer is not intended to be a prediction of what would actually happen. But it does quantify the impact on the entire economy of a change in the package of protectionist policies being studied. Depending upon the structure of the CGE model, impact results are also provided for particular sectors of the economy.

A typical CGE model will specify a number of sectors of concern, or "focus" sectors. These would be the sectors of primary concern and selected on the basis of the particular trade-policy package to be examined. The remainder of the national economy would be aggregated into a number of "reference" sectors. Primary resources will flow into or out of the reference sectors, depending upon the impact of the trade-policy package; as a result output levels would change.

In order to operationalize the model, quantitative information is needed on the inter-sectoral flows, value added by sector, international trade flows, and final demands. The model is then "calibrated" to a base year data set to assure that simulations begin from a situation that is consistent with real world events. The model is then shocked by the trade-policy package; new sectoral outputs, imports, exports and consumption are calculated. The

difference between the initial conditions and the resulting simulated conditions constitutes the impact of the policy package. In addition, a national welfare effect can be calculated as the difference between the base year level of national income and the level of income that would be required to purchase the post-simulation level of outputs of all sectors combined; this measure is referred to as the "equivalent variation."

Notes

a/ The price effect for consumers and producers is always the same. The price effects for the revenue/rents effect will also be the same for small countries, i.e., countries whose imports are two small to affect world prices. For a large country, the price effect for the revenue/rents effect will exceed the price effect for consumers and producers.

b/ In the small country case, consumer losses exceed the sum of producer gains and the revenue/rents effect.

c/ This assumes that the country is not sufficiently important to the world market such that a change in imports would affect the world price.

d/ This assumes the small country case.

e/ The quantification of this price effect requires information on the own-price elasticity of demand and the cross price elasticity of demand for the domestically produced good.

f/ The producer benefits estimated for the protected industry include (a) higher profits in that industry, (b) higher wages and salaries in that industry, (c) higher prices for other primary factors used in that industry, and (d) higher factor rewards (including profits, wages and salaries) accruing to the providers of input materials and components, i.e., the upstream suppliers.

g/ If the domestic and imported input are perfect substitutes, the two prices will be identical.